JCST

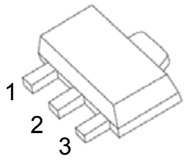
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO.,LTD

SOT-89-3L Plastic-Encapsulate Transistors

PXT3906 TRANSISTOR (PNP)

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



FEATURES

- Compliment to PXT3904
- Low current
- Low voltage

MARKING: 2A

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-0.2	A
P_C	Collector Power Dissipation	0.5	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-10μA,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10μA,I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-30V,I_E=0			-0.05	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-6V,I_C=0			-0.05	εA
Collector cut-off current	I_{CEX}	V_{CB}=-30V,$V_{BE(off)}$=-3V			-0.05	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V,I_C=-0.1mA	60			
	$h_{FE(2)}$	V_{CE}=-1V,I_C=-1mA	80			
	$h_{FE(3)}$	V_{CE}=-1V,I_C=-10mA	100		300	
	$h_{FE(4)}$	V_{CE}=-1V,I_C=-50mA	60			
	$h_{FE(5)}$	V_{CE}=-1V,I_C=-100mA	30			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	I_C=-10mA,I_B=-1mA			-0.25	V
	$V_{CE(sat)2}$	I_C=-50mA,I_B=-5mA			-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)1}$	I_C=-10mA,I_B=-1mA	-0.65		-0.85	V
	$V_{BE(sat)2}$	I_C=-50mA,I_B=-5mA			-0.95	V
Transition frequency	f_T	V_{CE}=-20V,I_C=-10mA,f=100MHz	250			MHz
Collector capacitance	C_c	V_{CB}=-5V,I_E=0,f=1MHz			4.5	pF
Emitter capacitance	Ce	V_{EB}=-0.5V,I_C=0,f=1MHz			10	pF
Noise figure	NF	V_{CE}=-5V,I_c=-0.1mA,f=10Hz-15.7kHz, R_S=1KΩ			4	dB
Delay time	t_d	I_C=-10mA , I_{B1}=-I_{B2}= -1mA			35	ns
Rise time	t_r				35	ns
Storage time	t_S				225	ns
Fall time	t_f				75	ns

A,May,2011